

Sublingual (Hard Lozenge) Composition

To prepare a pharmaceutical composition for buccal delivery, such as a hard lozenge, mix 100 mg of a compound of Formula (A), with 420 mg of powdered sugar mixed, with 1.6 mL of light corn syrup, 2.4 mL distilled water, and 0.42 mL mint extract. The mixture is gently blended and poured into a mold to form a lozenge suitable for buccal administration.

Example 6d

Inhalation Composition

To prepare a pharmaceutical composition for inhalation delivery, 20 mg of a compound of Formula (A) is mixed with 50 mg of anhydrous citric acid and 100 mL of 0.9% sodium chloride solution. The mixture is incorporated into an inhalation delivery unit, such as a nebulizer, which is suitable for inhalation administration.

Example 6e

Rectal Gel Composition

To prepare a pharmaceutical composition for rectal delivery, 100 mg of a compound of Formula (A) is mixed with 2.5 g of methylcellulose (1500 mPa), 100 mg of methylparaben, 5g of glycerin and 100 mL of purified water. The resulting gel mixture is then incorporated into rectal delivery units, such as syringes, which are suitable for rectal administration.

Example 6f

Topical Gel Composition

To prepare a pharmaceutical topical gel composition, 100 mg of a compound of Formula (A) is mixed with 1.75 g of hydroxypropyl cellulose, 10 mL of propylene glycol, 10 mL of isopropyl myristate and 100 mL of purified alcohol USP. The resulting gel mixture is then incorporated into containers, such as tubes, which are suitable for topical administration.

Example 6g

Ophthalmic Solution Composition

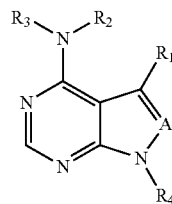
To prepare a pharmaceutical ophthalmic solution composition, 100 mg of a compound of Formula (A) is mixed with 0.9 g of NaCl in 100 mL of purified water and filtered using a 0.2 micron filter. The resulting isotonic solution is then incorporated into ophthalmic delivery units, such as eye drop containers, which are suitable for ophthalmic administration.

It is understood that the examples and embodiments described herein are for illustrative purposes only and that various modifications or changes in light thereof will be suggested to persons skilled in the art and are to be included within the spirit and purview of this application and scope of the appended claims. All publications, patents, and patent applications cited herein are hereby incorporated by reference in their entirety for all purposes.

What is claimed is:

1. A method for treating a lymphoma in a subject comprising administering to a subject in need thereof a therapeutically effective amount of a compound of Formula (A):

Formula (A)



wherein

A is N;

R₁ is phenyl-O-aryl or phenyl-S-aryl;

R₂ and R₃ are independently selected from H, lower alkyl and substituted lower alkyl;

R₄ is L₃-X-L₄-G, wherein,

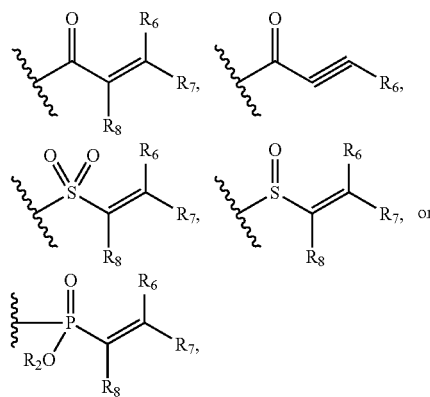
L₃ is optional, and when present is a bond, optionally substituted or unsubstituted alkyl, optionally substituted or unsubstituted cycloalkyl, optionally substituted or unsubstituted alkenyl, optionally substituted or unsubstituted alkynyl;

X is optional, and when present is a bond, O, —C(=O), S, —S(=O), —S(=O)₂, —NH, —NR₉, —NHC(O), —C(O)NH, —NR₉C(O), —C(O)NR₉, —S(=O)₂NH, —NHS(=O)₂, —S(=O)₂NR₉, —NR₉S(=O)₂, —OC(O)NH, —NHC(O)O, —OC(O)NR₉, —NR₉C(O)O, —CH=NO, —ON=CH, —NR₁₀C(O)NR₁₀, heteroaryl, aryl, —NR₁₀C(=NR₁₁)NR₁₀, —NR₁₀C(=NR₁₁), —C(=NR₁₁)NR₁₀, —OC(=NR₁₁), or —C(=NR₁₁)O;

L₄ is optional, and when present is a bond, substituted or unsubstituted alkyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl, substituted or unsubstituted heterocycle;

or L₃, X and L₄ taken together form a nitrogen containing heterocyclic ring;

G is



wherein, R₆, R₇ and R₈ are each independently H; each R₉ is independently selected from among H, substituted or unsubstituted lower alkyl, and substituted or unsubstituted lower cycloalkyl; each R₁₀ is independently H, substituted or unsubstituted lower alkyl, or substituted or unsubstituted lower cycloalkyl; or